

IN THE CLAIMS

1. (Currently Amended) An exposure control method in a lithography system having a resist coating and developing apparatus, a wafer transferring mechanism, and an exposure control apparatus, comprising: ~~the steps of:~~
transmitting resist film temperature data from the resist coating and developing apparatus to the exposure control apparatus;
determining a resist film exposure time responsive to the resist film temperature data;
and
exposing the resist film to a light source for the determined resist film exposure time.
2. (Currently Amended) The method as claimed in claim 1, wherein the resist film temperature data ~~are~~ is provided from temperature sensors disposed in the resist coating and developing apparatus.
3. (Currently Amended) The method as claimed in claim 1, wherein the resist film temperature data ~~are~~ is provided for a soft bake, a post exposure bake, and a hard bake of the resist film.
4. (Currently Amended) The method as claimed in claim 1, wherein ~~the step of~~ determining the resist film exposure time ~~includes~~ comprises analyzing the received temperature data and an error value in a pattern size.
5. (Currently Amended) An exposure control apparatus in a lithography system having a resist coating and developing apparatus and a wafer transferring mechanism, comprising:
a receiver ~~for receiving~~ configured to receive resist film heat treating temperature data from the resist coating and developing apparatus;
an optical system ~~exposing~~ configured to expose at least a portion of the resist film to a light source; and
an optical system controller adapted to determine and control a resist film exposure time responsive to the resist film heat treating temperature data received from the resist coating and developing apparatus.

6. (Currently Amended) The apparatus as claimed in claim 5, wherein the resist film heat treating temperature data is provided from temperature sensors disposed in the resist coating and developing apparatus.

7. (Currently Amended) The ~~method~~ apparatus as claimed in claim 5, wherein the resist film heat treating temperature data is for a soft bake, a post exposure bake and a hard bake of the resist.

8. (Currently Amended) The ~~method~~ apparatus as claimed in claim 5, wherein ~~determining and controlling the exposure time are implemented by analyzing the optical system controller is further adapted to analyze the received resist film heat treating~~ temperature data and ~~the~~ an error value in a pattern size.

9. (Currently Amended) A lithography system comprising:
a resist coating and developing apparatus including at least one resist film temperature sensor;
a wafer transferring mechanism; and
an exposure control apparatus including a receiver for receiving configured to receive resist film temperature data from the resist coating and developing apparatus, an optical system ~~for exposing~~ configured to expose the resist film to a light source, and a controller ~~for controlling~~ configured to control the optical system and configured to determine and control a resist film exposure time responsive to the resist film temperature data.

10. (Currently Amended) The system as claimed in claim 9, wherein the resist film temperature data ~~are~~ is provided for a soft bake, a post exposure bake, and a hard bake of the resist.

11. (Currently Amended) The system as claimed in claim 9, wherein the controller ~~determines~~ is also configured to determine the resist film exposure time responsive to the received resist film temperature data and ~~a predetermined~~ an error value in a pattern size.